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**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
800 Data Base Access Tariffs and the)	DA 93-930
800 Service Management System Tariff)	CC Docket No. 93-129

AFFIDAVIT OF JAMES F. BRITT

I, James F. Britt, being duly sworn, depose and say:

1. I am employed by Bell Communications Research, Inc., (Bellcore) as Executive Director, Central Office and Network Cost Support, responsible for the development, maintenance, enhancements, documentation and licensing of the Common Channel Signaling Cost Information System (CCSCIS) referred to in paragraphs 28 and 29 and footnote 24 of the Common Carrier Bureau Order, released on July 19, 1993, with respect to the above-identified matter. Paragraph 29 requires that those Local Exchange Carriers (LECs) who plan to use CCSCIS for purposes of developing unit investment estimates for 800 data base services must disclose the CCSCIS model on the record, or provide some other justification for its rates. The basis for this requirement was embodied in footnote 24 of the Order wherein the Bureau determined that since two LECs were able to develop costs without use of a computer model, dependence on such models was not necessary for 800 data base services.

2. As the attached Declarations and/or statements show, all LECs that calculated capital related costs associated with 800 data base service relied upon CCSCIS or a similar model in their cost estimates. Reasonable alternatives to the use of such models

are not available. CCSCIS is a dynamic complex software model. It encompasses a PC-based family of twelve modules which analyze investments for ten Signalling System 7 (SS7) system technologies from six manufacturers: Northern Telecom Inc., AT&T, Ericsson Network Systems Inc., DSC Communications, Digital Equipment Corporation and IBM. Each technology is comprised of a Module which produces basic signaling resource investments.

3. Bellcore's clients pay Bellcore for the use of CCSCIS because it is unique, valuable, highly complex, and the result of the painstaking and costly efforts of numerous Bellcore employees and employees of equipment vendors. The model's cost, uniqueness, and value to its users derives from the complexity of the problems that CCSCIS is designed to solve. This complexity is embedded in the fact that the SS7 network and the attendant hardware is shared by many services. Absent the rigorous analysis performed by CCSCIS, it is virtually impossible to identify that investment which is attributable to any individual service.

4. CCSCIS analysis includes: Bellcore-developed methods, procedures and processes; vendor specific SS7 system architecture and attendant resource consumption and pricing data; and user-defined system specifications and subscriber usage for service applications. The outputs provide users with resource investments which reflect the serving community under evaluation. The system involves the conceptual and analytical work efforts of approximately six Bellcore employees. Their work includes, but is not limited to: a "bottom-up" functional partitioning of each equipment component to a specific cost category; Resource Costing,

the process of utilizing the partitioning results to generate cost primitives which can be defined as the lowest reasonable cost increments necessary to produce function specific costs for each system technology; and Cost Aggregation, the process of combining appropriate system technology Resource Cost primitives for purposes of describing the cost of specific signaling procedures. My experience with the CCSCIS model and the users thereof leads me to conclude that access to the system is an essential prerequisite to establishing cost causation for regulatory filing purposes. Without CCSCIS, telephone operating companies would have to expend considerable time and effort to develop systems that replicate or approximate CCSCIS. The alternative is to use an arbitrary "top down" approach that will not produce physically significant results. CCSCIS contains in excess of 94 program files, over 72,000 lines of code and 172 screen and table files. Approximately \$2.4 million dollars have been spent on its development and annual maintenance since 1989. In addition, Bellcore has derived over \$3.0 million dollars in revenue from the Bell Operating Companies (BOCs) and industry clients for CCSCIS. If CCSCIS were to be made generally available to the public, as required by paragraph 29 of the Bureau Order, Bellcore would be irreparably and irrevocably harmed.

5. CCSCIS is not a static system. Indeed, it is a dynamic one which requires repeated attention and interaction among Bellcore, the switch vendors and users. There have been over 16 CCSCIS software releases since the program was developed reflecting new technologies, engineering rules, Service Control Point (SCP)

and Signalling Transfer Point (STP) architectures, and price revisions. Those software releases also reflected conceptual/analytical and human factor-related enhancements. In fact, approximately thirty-five to forty percent of the system code is revised on an annual basis. The cost of these releases is funded by fees paid by the BOCs and the non-owner licensees of CCSCIS. As stated above, these activities require the attention of approximately six Bellcore employees. The costs of annual updating account for a substantial portion of the approximately \$400,000 Bellcore must spend each year on CCSCIS. Substantial effort and expense would be required for any competitor or client of Bellcore to duplicate or approach the CCSCIS model's capabilities. In my view, that is why Bellcore's clients pay substantial fees for use of CCSCIS. This is understandable, considering the size of the CCSCIS model and the over 4,000 algorithms in CCSCIS that require constant maintenance.

6. CCSCIS is functionally dependent on the ability of Bellcore to obtain proprietary information from the six STP and SCP vendors listed above in Paragraph 2. Such information includes: technical data inclusive of architecture and capacities; vendor specific price information on a component basis, and consumption of total capacity for each equipment function. This data is considered highly sensitive by and proprietary to the vendors since access to such information would adversely affect competition in the STP and SCP manufacturing market. Public disclosure of the vendor specific detailed engineering specifications and prices included in CCSCIS could enable competitors to adjust price lists

to obtain market share. While vendors voluntarily provide the necessary proprietary data to Bellcore, they do so only pursuant to strict nondisclosure and limited use Agreements. Such Agreements even preclude the CCSCIS development organization within Bellcore from sharing the data with other Bellcore planning and engineering staff. Representative obligations of Bellcore under such confidentiality agreements are:

- a. hold the information in confidence . . . ;
- b. restrict disclosure of information . . . solely to those employees of Bellcore and its affiliates (the BOCs) having a need to know for purposes set forth therein;
- c. advise those employees of their obligations with respect to the information; and
- d. use the information only to the extent necessary to populate the fields and data bases included in Bellcore's CCSCIS software system distributed to Bellcore's shareowner companies and industry clients under license agreement.

7. Any public release of Bellcore's CCSCIS model would violate its non-disclosure agreements with the vendors who supply much of the technical data needed for the model to function effectively. Such unauthorized disclosure of proprietary information would significantly injure the competitiveness of those vendors in the telecommunications field. There is also a substantial risk that if the vendor information were to be made public, the vendors would discontinue providing such proprietary data to Bellcore. Without the continual flow of such vendor data, CCSCIS would become dysfunctional. Even if only one or two of the six vendors discontinued providing data, such a decrease would severely impair the usefulness of CCSCIS. And, of course, if CCSCIS were to become a

less useful cost-modeling apparatus, then its licensees would have less or even no incentive to pay Bellcore's license fees for the model. This would result in a dramatic loss in revenues to Bellcore, both in the present and prospectively, and could cost Bellcore up to \$3.5 million over a five-year period.

8. CCSCIS is licensed to and used by BOCs owned by six of the Bellcore owner companies: Ameritech Operating Companies (Ameritech), Bell Atlantic Telephone Companies (Bell Atlantic), BellSouth Corporation (BellSouth), New York Telephone Company and New England Telephone and Telegraph Company (NYNEX), Pacific Bell and Nevada Bell (Pactel), and Southwestern Bell Telephone Company (SWB). CCSCIS is also currently used by five industry clients, pursuant to license agreements with Bellcore. These industry licensees are: Optus (Australia), Telefonos de Mexico (Mexico), Sprint, Ltd. (U.S.), Cincinnati Bell Telephone (U.S.) and Southern New England Telephone (U.S.). All of the above entities use the system for purposes of developing rate element-specific cost data for both state and interstate tariff filings.

9. As I stated previously, the licensing fees paid to Bellcore for the use of CCSCIS are substantial. New subscribers to the CCSCIS model (i.e., industry clients) must pay Bellcore a one-time Right-To-Use fee and a maintenance fee for any updates to the model and a user support fee for any assistance that may be required. International clients must also pay extra fees for any adaptations that must be made to the CCSCIS algorithms and software to reflect variations in a particular foreign market. Older users of CCSCIS, as well as each of the regional BOCs, must pay periodic

user support fees and maintenance fees for any additions that are made to the model. The revenues generated by CCSCIS licensing fees from 1989 to 1992 were quite considerable and totalled \$3.027 million for that four-year period. These revenues are broken down below in Table I. The CCSCIS model also holds the potential for additional consulting-business revenues to Bellcore.

TABLE I

LICENSING REVENUES PER YEAR (thousands)				
<u>LICENSEE</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
Regional BOCs	\$502.7	\$482.8	\$635.9	\$566.6
Industry clients	<u>\$223.1</u>	<u>\$199.4</u>	<u>\$198.5</u>	<u>\$218.0</u>
TOTAL:	\$725.8	\$682.2	\$834.4	\$784.6

10. Aside from the current CCSCIS licensees, Bellcore is engaged in a full-scale marketing and sales effort worldwide geared to secure new CCSCIS licensees and related revenues. Bellcore also maintains a Consulting Practice which routinely encompasses efforts in systems development (both primary and secondary) and performance management. These activities all produce significant sources of revenue which is expected to increase substantially in the future and are dependent on the continued viability of the CCSCIS model.

11. While CCSCIS is an important tool for a variety of cost-modeling analyses, it faces a great deal of competition from rival manufacturers. Analysis, Ltd., US West, and GTE have produced their own cost models, which they have used themselves and may have licensed to various other companies. Various businesses and individual consulting firms are also capable of and may have

developed competing processes and models. All of these commercial adversaries would benefit from the public release of CCSCIS and those in the development stages might get access to information that could make the difference between a merely "potential" product and a marketable model that would reduce the CCSCIS market share.

12. The viability of CCSCIS and the maintenance of its competitive position are even more important in the face of a rapidly growing international need for costing analysis. "Start-up" enterprises in foreign markets promise to represent a large source of revenues in the next few years for cost models like CCSCIS. There is also a great demand, both domestically and internationally, among current users of cost-modeling. These markets include the development of new application tools for operating models, and enhancements to reflect emerging technologies (e.g., in the area of Advanced Intelligent Network (AIN) platforms and processes). Bellcore estimates that this growing market for cost models will produce sales of \$11.4 million for 1993 (up 52 percent from \$7.5 million in 1991) and will expand by another 42 percent by 1996, with projected annual revenues of \$16.2 million. Over half of the projected sales for 1996 would probably derive from the international market which is growing almost exponentially, whereas in 1991, international clients accounted for less than 0.5 percent of Bellcore's cost-modeling sales. Furthermore, the figures for 1996 do not even include an additional \$4 million in revenues expected from ancillary systems developments. Consequently, public availability of the CCSCIS model could significantly impair its performance in a highly competitive and growing global market and

could lead to literally millions of dollars in lost revenues for Bellcore.

13. Bellcore will, therefore, suffer serious and substantial competitive harm in the telecommunications cost-modeling service market if the CCSCIS program is disclosed for unrestricted public use. The CCSCIS model is an important part of Bellcore's stock-in-trade. Bellcore has historically been considered the leader in the switching cost modeling market, and I know of no other firm that has invested more heavily in models designed for that market or that has accumulated a more substantial data base of telecommunications equipment cost and technical information.

14. If Bellcore's work on the CCSCIS model became available to our competitors for a few hundred dollars in copying fees, it would become much easier and less costly for our competitors to offer services comparable to the CCSCIS program, without needing to recover the large investment cost Bellcore has already incurred. Bellcore will have lost much of the future value of the over \$2.4 million spent since 1989 to build the computer program and keep it current. Moreover, if our programming code, our algorithms, our economic models, or the documentation explaining how the CCSCIS program operates enters the public domain, our licensees might develop their own cost models and have little or no future need for our services. Bellcore would certainly lose a significant portion of the revenue it currently receives yearly in licensing and CCSCIS maintenance fees, which in 1992 was approximately \$1 million.

15. The Bellcore proprietary CCSCIS system is owned exclusively by Bellcore and, since 1989, its development has been funded by the BOCs, who are licensed to operate the system for their own use. Further, licenses granted to industry clients, are granted pursuant to a written license agreement with Bellcore. All licenses grant the licensee a personal, nonexclusive and nontransferable right to use the CCSCIS system solely within and for licensee's own business.

16. The CCSCIS model comprises confidential business information which has never been publicly disclosed and which is subject to a number of safeguards to prevent its unauthorized release. CCSCIS software and documentation are trade secrets and contain conspicuous legends which identify them as proprietary to Bellcore. More specifically, the following notice is contained on the CCSCIS software label and on the initial page of the CCSCIS documentation:

**PROPRIETARY
BELLCORE AND AUTHORIZED CLIENTS ONLY**

**This Document contains proprietary information that shall be
distributed or routed only within Bell Communications
Research (Bellcore) and its authorized clients,
except with written permission of Bellcore.**

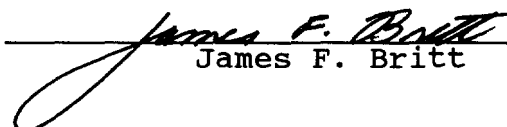
Subsequent pages of the CCSCIS documentation contain the following notice:

Proprietary - Bellcore and Authorized Clients Only
See proprietary restrictions on title page.

17. In addition, Bellcore imposes contractual obligations in the license agreements between Bellcore and the CCSCIS licensees to further protect the proprietary nature of the product. Licensees must hold the licensed information in confidence; not disclose licensed information to anyone other than its employees who have a need to know; make no copies of the licensed information; and refrain from decompiling, disassembling or decoding the software, or deriving any source code or algorithms therefrom. Specific representative provisions imposed upon licensees are:

- a. LICENSEE shall hold the LICENSED INFORMATION (the CCSCIS software and documentation) in confidence for the benefit of LICENSOR (Bellcore) as proprietary information. The LICENSED INFORMATION shall be clearly and conspicuously marked as LICENSOR's proprietary information. LICENSEE shall not make any disclosure of the LICENSED INFORMATION (including methods or concepts utilized therein) to anyone other than its employees who have a need to know. LICENSEE shall notify its employees of their obligations of confidentiality with respect to LICENSED INFORMATION. The obligations of LICENSEE and its employees shall survive and continue after any termination of LICENSEE's rights under this Master Agreement (License Agreement). Such obligations shall not extend to any information relating to LICENSED INFORMATION which is now available or which later becomes available to THIRD PARTY (any individual, corporation, partnership, association or other entity, other than the parties to the License Agreement) without restriction by acts not attributable to LICENSEE or its employees.
- b. No copies shall be made of the LICENSED INFORMATION (other than one (1) backup copy) nor shall LICENSEE reverse engineer, decompile, disassemble or decode any software furnished hereunder, or derive any source code or algorithms therefrom.
- c. Title in the LICENSED INFORMATION shall remain in LICENSOR.

18. For the reasons described above, Bellcore's CCSCIS model is commercially sensitive confidential information and comprises trade secrets which would cause the equipment manufacturers and Bellcore's business substantial and irreparable harm if it were released to the public.


James F. Britt

Subscribed and sworn to
before me, a Notary Public,
this 15 day of September, 1993.


Notary Public

LUCINDA NEWSOME
A Notary Public of New Jersey
My Commission Expires Aug. 30, 1998